

Claims

1. An electrically powered animal trap, which comprises
 - a set of electrodes for electrocution of an animal, and
- 5 - means for communicating a surveillance signal between the trap and an external surveillance unit.
2. A trap according to claim 1 further comprising
 - a bottom with an upwardly extending sidewall,
- 10 - a top section,
 - at least one entrance, and
 - an exit.
3. A trap according to any of the preceding claims wherein the trap defines a chamber
- 15 between an entrance and an end section, which end section supports arrangement of bait.
4. A trap according to any of the preceding claims wherein the electrodes are arranged sequentially in the direction of the chamber.
- 20 5. A trap according to any of the preceding claims further comprising means for lifting up the trap.
6. A trap according to claim 5, wherein the means for lifting comprises at least one leg.
- 25 7. A trap according to claim 6 wherein the at least one leg is adjustable in length.
8. A trap according to claim 7 wherein the adjustment of the length is actuated by pressurized gas.
- 30 9. A trap according to any of claims 6-8 wherein the legs are telescopic legs.
10. A trap according to any of the preceding claims, further comprising a receptacle for storing the electrocuted animals.
- 35 11. A trap according to claim 10 wherein the receptacle and the trap is sealed.
12. A trap according to any of the preceding claims further comprising an electronic circuit including at least one micro processor, wherein the electronic circuit is adapted to generate the high-voltage potential from a low voltage power source upon detection of an animal.

13. A trap according to claim 12 wherein the animal is detected by an electronic detector connected to the electronic circuit.
- 5 14. A trap according to claim 13 wherein electronic detector is adapted to detect motion of an animal.
15. A trap according to claim 13 or 14 wherein the electronic detector is adapted to detect weight of an animal.
- 10 16. A trap according to any of the claims 12-15 wherein the high-voltage potential is generated in pulses.
17. A trap according to claim 16 wherein the pulses are in the form of a sinusoidal wave, a
15 step pulse or a series of pulses.
18. A trap according to any of the preceding claims wherein the set of electrodes comprises at least 3 electrodes.
- 20 19. A trap according to any of the preceding claims, wherein the surface of the electrodes is rough.
20. A trap according to claim 19 wherein the roughness of the surface is provided by adhering metal shavings to a metal plate.
- 25 21. A trap according to any of claims 18-20 wherein a first of the electrodes is connected to a second of the electrodes and wherein a third of the electrodes is electrically isolated from the first and second electrodes.
- 30 22. A trap according to claim 21 wherein the electrocuting is obtained by generating a high-voltage difference between the first and the third electrode.
23. A trap according to any of claims 12-22 wherein the power source for generating the high-voltage difference is a low voltage, high capacity DC-battery.
- 35 24. A trap according to claims 22 wherein the high-voltage potential is generated upon detection of a leak current through the animal between the first and second electrode.

25. A trap according to any of the preceding claims, further comprising a lever arm for detecting the presence of an animal.
26. A trap according to claims 25 where the high-voltage potential is generated when an
5 animal moves the lever arm.
27. A trap according to any of the preceding claims further comprising an entrance ramp.
28. A trap according to claim 27, wherein the ramp is made from a material selected from
10 the group consisting of: wood, plastic, stainless steel and nickel.
29. A trap according to any of the preceding claims further comprising a mount at the entrance such that an additional section can be mounted in front of the entrance.
- 15 30. A trap according to claim 29 wherein the mount section comprises an entrance tube.
31. A trap according to claim 30 wherein the tube has at least one bent.
32. A trap according to claims 30-31 wherein said tube possesses one of the following
20 shapes: an s-form, an elbow, and a zigzag.
33. A trap according to any of the preceding claims further comprising a power adapter that allows direct connection to an existing power network.
- 25 34. A trap according to claim 33 wherein the power adapter is compatible with an input voltage with an AC-amplitude between 110 to 380 V.
35. A trap according to any of the preceding claims further comprising a battery charger.
- 30 36. A trap according to any of the preceding claims wherein the exit is operated automatically upon electrocution of an animal.
37. A trap according to claim 36, wherein the exit is actuated either electrically, hydraulically, pneumatically, mechanically or by any combination of these.
- 35 38. A trap according to any of the preceding claims wherein the exit is a trapdoor.
39. A trap according to any of the preceding claims wherein the electrodes are shielded from water flooding from above.

40. A trap according to any of the preceding claims wherein the electronic circuit is embedded in a waterproof housing.
- 5 41. A trap according to any of the preceding claims further comprising a water-level detector adapted to send out an electronic signal, in the case water is detected in a level above a predetermined level, and wherein the electronic circuit is adapted to react in response to an electronic signal from the water level detector by disabling the generation of the high-voltage.
- 10 42. A trap according to any of claims 12-41, wherein the electronic circuit stores an identification code for the trap.
43. A trap according to any of the preceding claims wherein the means for communicating a surveillance signal comprises means for transmitting a wireless signal to an external unit provided with a receiver for receiving such a surveillance signal.
- 15 44. A trap according to any of the preceding claims, further comprising a receiving unit for receiving a command signal from the external unit.
- 20 45. A trap according to any of claims 43-44, wherein the wireless signal is an electromagnetic signal.
46. A trap according to any of the preceding claims wherein the surveillance signal is only send out upon receiving a request signal.
- 25 47. A trap according to claim 45 wherein the electromagnetic signal is a radio-signal.
48. A trap according to any of claims 45-47, wherein the frequency of the electromagnetic signal is in the range 2.2 to 2.8 GHz.
- 30 49. A trap according to any of the preceding claims further comprising means for determining the geographical position of the trap.
- 35 50. A trap according to any of the preceding claims, wherein the surveillance signal contains information about at least one of the following particulars:
- the number of captured animal,
 - the condition of the battery,

- the remains of the bait, the position of the trap, and/or
- an Identification code for the trap.

51. A trap according to any of claims 2-50 wherein the size of the entrance is adjustable.

52. A trap according to claim 51 wherein the size of the entrance is adjustable via the communication means.

53. A trap system comprising:

- at least one trap according to any of the preceding claims, and
- at least one external unit comprising:
 - communication means for receiving a surveillance signal from the trap and optionally, for transmitting a command signal to the trap, and
 - computer processing means adapted in response to commands from computer software to read the status of either a single trap or an ensemble of traps.

54. A method for electrocuting an animal comprising the steps of:

- detecting an animal
- electrocuting the animal
- updating an information storage with information relating to a total number of electrocutions, and
- transmitting a surveillance signal to an external unit, the surveillance signal comprising the information relating to the total number of electrocutions.

55. A method where an electrocuting trap comprises a water-level detector adapted to send out an electronic signal, in the case the water level rises above a predetermined level, and wherein an electronic circuit for electrocution is adapted to react in response to an electronic signal from the water level detector by disabling the generation of the high-voltage.